

Figure 1A

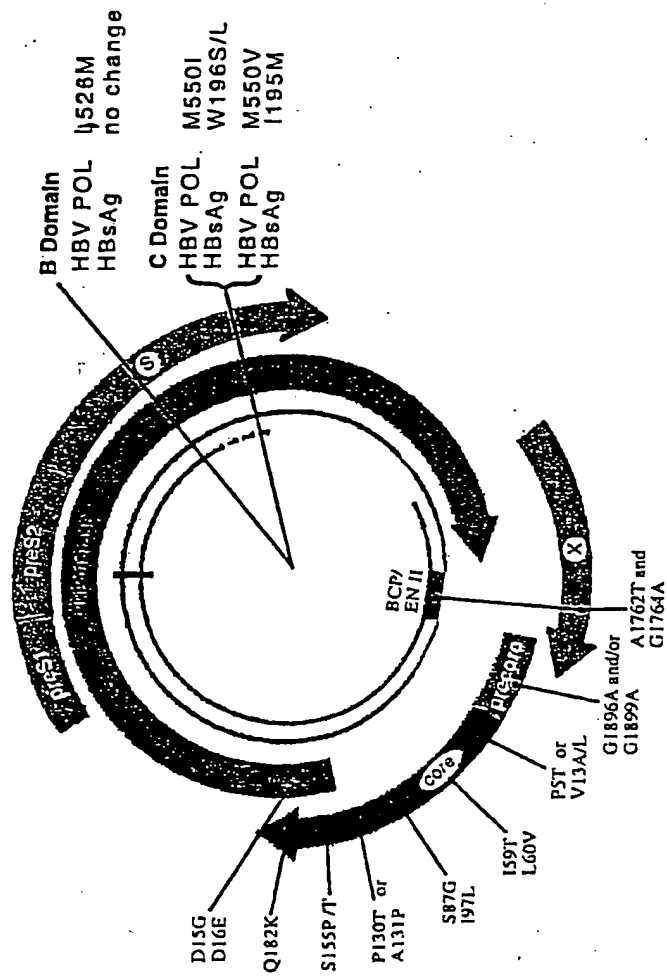


Figure 1B

(421) 430 440 450  
 422 438  
SNDLSWLSLD VSAAFYH<sup>I</sup><sub>P</sub>PL HPAAMPPHLLIV GSSGL<sup>D</sup><sub>S</sub>RYVA

## Domain A

HBsAg G112R T123P Y/F134S D144E G145R  
 460 470 480 490  
 464 466 477 488 499  
 RLSS<sup>T</sup><sub>N</sub>SR<sup>R</sup><sub>N</sub>NI\*<sup>N</sup> NY<sup>H</sup>Q<sup>Y</sup><sub>H</sub>G<sup>R</sup>\*\*\*<sup>D</sup><sub>N</sub>LH <sup>D</sup><sub>N</sub><sup>Y</sup>SCSR<sup>D</sup><sub>Q</sub>LYVS L<sup>L</sup><sub>M</sub>LLY<sup>K</sup><sub>Q</sub>TY<sup>F</sup><sub>R</sub>W

HBsAg A157D E164D F170L  
 500 510 520 530  
 512 519 523/524/526/528/530  
 KLHL<sup>Y</sup><sub>L</sub>SAHP<sup>I</sup><sub>I</sub>V LGFR<sup>K</sup><sub>I</sub>LPMG<sup>V</sup><sub>G</sub> GLSPFLLAQF TSAIC<sup>L</sup><sub>S</sub>A<sup>V</sup><sub>M</sub><sup>V</sup><sub>T</sub>R<sup>R</sup><sub>C</sub>R

## Domain B

HBsAg W196L W199S  
M195I/S196W M198I S204T S210R  
 540 550 560  
 546 550 553 559 565  
 AFF<sup>P</sup><sub>H</sub>CL<sup>V</sup><sub>V</sub>A<sup>F</sup><sub>S</sub>AY MDDV<sub>L</sub>MVLGA<sup>K</sup><sub>R</sub><sup>S</sup><sub>T</sub> V<sup>G</sup><sub>Q</sub>EHL<sup>S</sup><sub>R</sub>ES<sup>F</sup><sub>L</sub>Y<sup>T</sup><sub>F</sub>A<sup>S</sup><sub>A</sub>

## Domain C

570 580 590  
 575  
 I<sup>V</sup><sub>T</sub>C<sup>N</sup><sub>S</sub>F<sup>V</sup><sub>L</sub>LS<sup>D</sup><sub>V</sub>GI HLNPN<sub>Q</sub>KTKRW GYSLNFMGY<sup>I</sup><sub>V</sub>I G

## Domain D

## Domain E

Figure 2

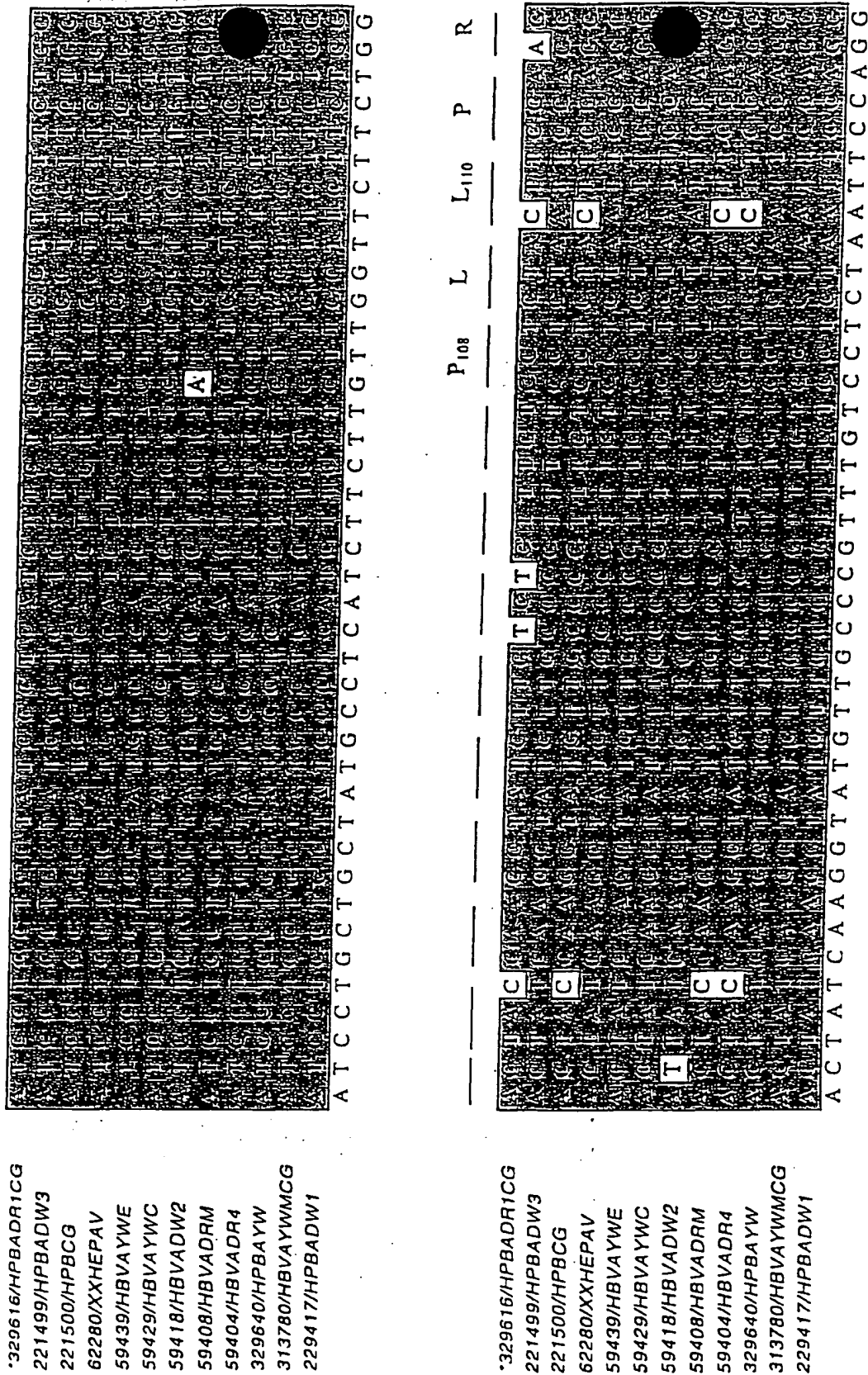


Figure 3

\*329616/HPBADR1CG  
 221499/HPBADW3  
 221500/HPB8CG  
 62280/XXHEPAV  
 59439/HBVAYWE  
 59429/HBVAYWC  
 59418/HBVADW2  
 59408/HBVADRM  
 59404/HBVADR4  
 329640/HPBAYW  
 313780/HBVAYWMCg  
 229417/HPBADW1

\*\*329616/HPBADR1C6  
 2221499/HPBADW3  
 2221500/HPBCG  
 622280/XXHEPAV  
 594339/HBVAWE  
 59429/HBVAWC  
 59418/HBVADW2  
 59408/HBVADRM  
 59404/HBVADR4  
 329640/HPBAYW  
 313780/HBVAWMC6  
 2229417/HPBADW1

**Figure 3 continued**

\*329616/HPBADR1CG  
221499/HPBADW3  
221500/HPBCG  
62280/XXHEPAV  
59439/HBVAYWE  
59429/HBVAYWC  
59418/HBVADW2  
59408/HBVADRM  
59404/HBVADR4  
329640/HPBAYW  
313780/HBVAYWMCg  
229417/HPBADW1

\*329616/HPBADR1CG  
221499/HPBADW3  
221500/HPBCG  
62280/XXHEPAV  
59439/HBVAWE  
59429/HBVAWC  
59418/HBVADW2  
59408/HBVADRM  
59404/HBVADR4  
329640/HPBAYW  
313780/HBVAWMCB  
229417/HPBADW1

**Figure 3 continued**

A S V R F<sub>170</sub> S W L S L L V P

GCCTCAGTCCGTTTCTCTCTGGCTCAGTTTACTAGTGCCAT

F V<sub>180</sub> Q W F V G L S P T V<sub>190</sub> W<sub>191</sub> L<sub>192</sub>

TTGTTTCAGTGGTTTCGTAGGGCTTTCCCCCACTGTTTGGCT

329616/HPBADR1CG  
221499/HPBADW3  
221500/HPBCG  
62280/XXHEPAV  
59439/HBVAYWE  
59429/HBVAYWC  
59418/HBVADW2  
59408/HBVADRM  
59404/HBVADR4  
329640/HPBAYW  
313780/HBVAYWMCG  
229417/HPBADW1

329616/HPBADR1CG  
221499/HPBADW3  
221500/HPBCG  
62280/XXHEPAV  
59439/HBVAYWE  
59429/HBVAYWC  
59418/HBVADW2  
59408/HBVADRM  
59404/HBVADR4  
329640/HPBAYW  
313780/HBVAYWMCG  
229417/HPBADW1

Figure 3 continued

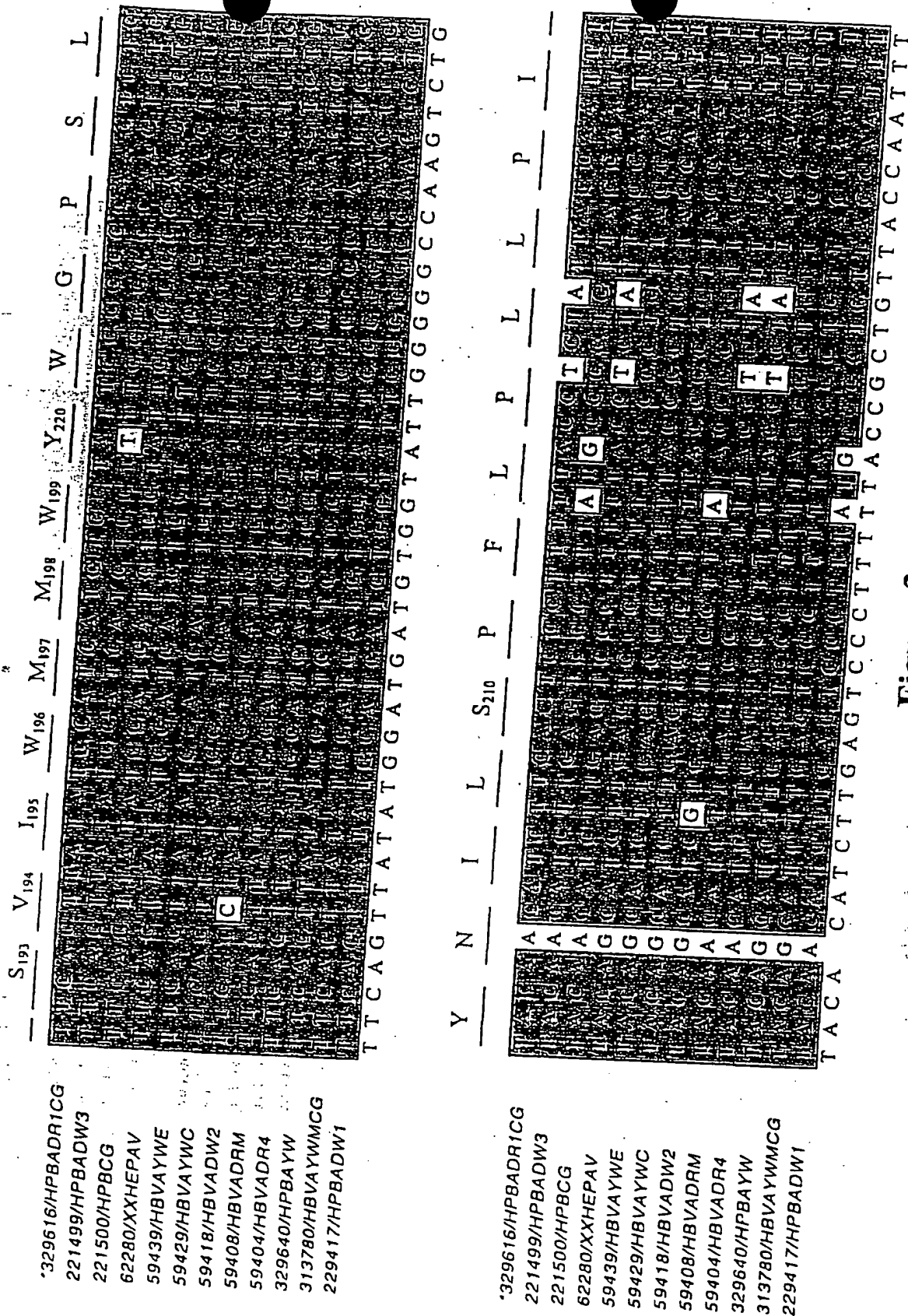
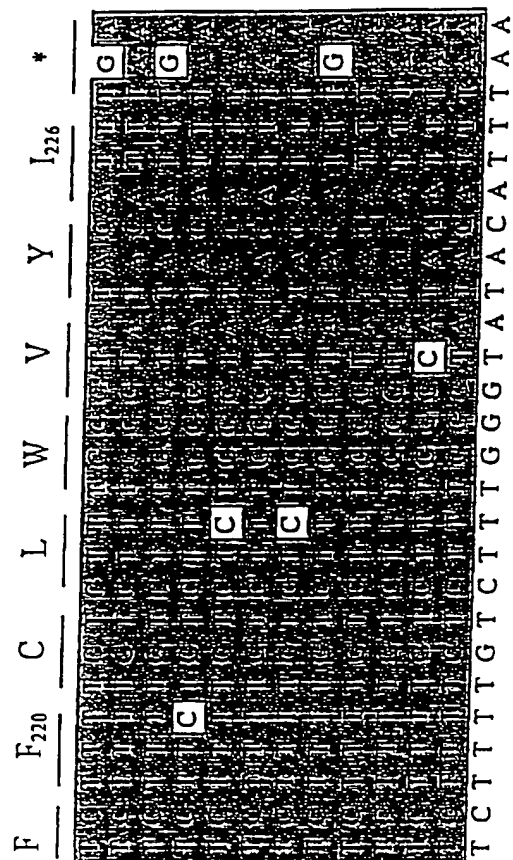


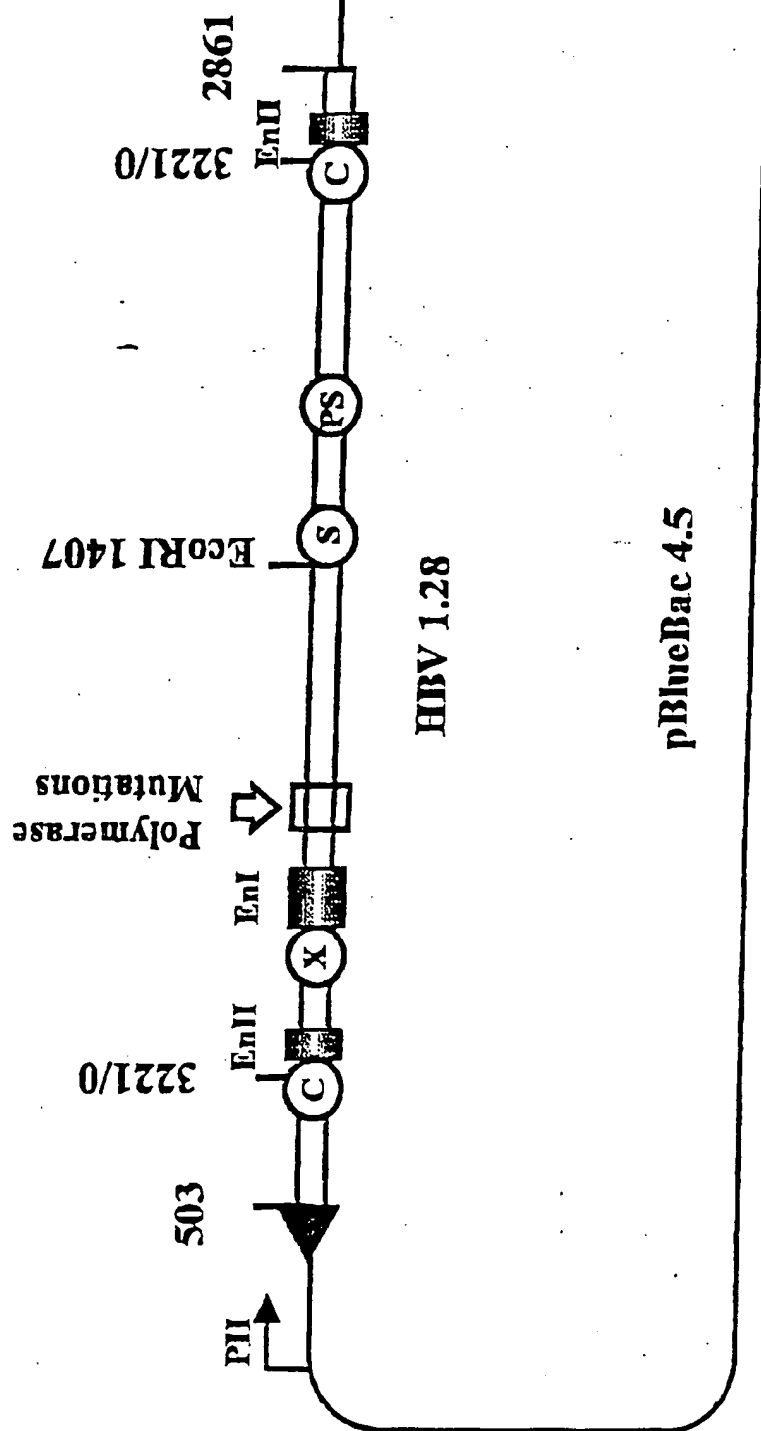
Figure 3 continued





\*\*329616/HPBADR1CG  
 221499/HPBADW3  
 221500/HPBCG  
 62280/XXHEPAV  
 59439/HBVAWE  
 59429/HBVAWC  
 59418/HBVAW2  
 59408/HBVADRM  
 59404/HBVADR4  
 329640/HPBAYW  
 313780/HBVAWVMCG  
 229417/HPBADW1

**Figure 3 continued**



**Figure 4A**

**pBBHBV1.5**

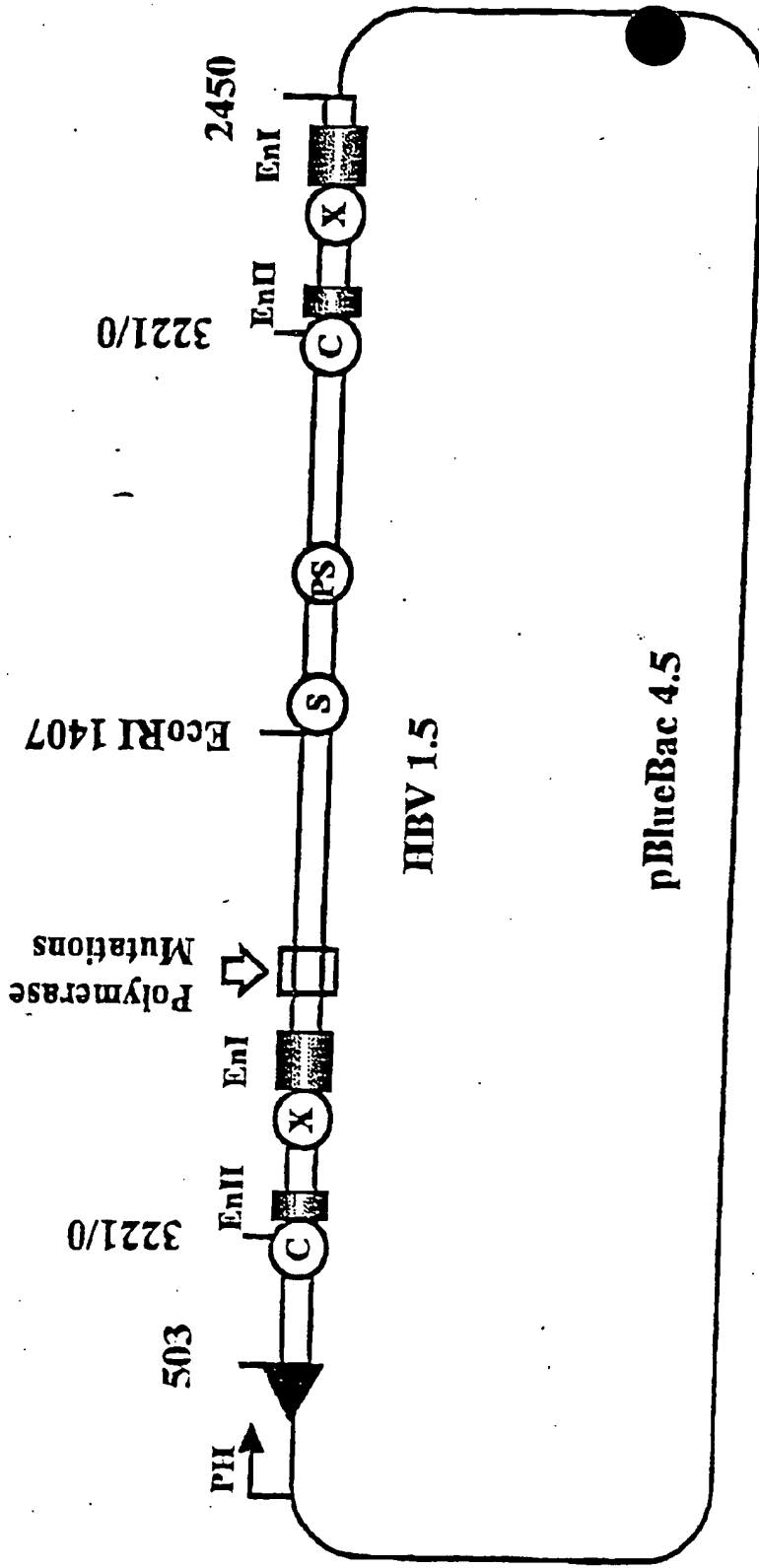


Figure 4B

Sequence Range: 1 to 4084

10 20 30 40 50  
GGACGACCCCTCGCGGGGCCGCTTGGGACTCTCTCGTCCCCTTCTCCGTC

60 70 80 90 100  
TGCCGTTCCAGCCGACCACGGGGCGCACCTCTCTTTACGCGGTCTCCCCG

110 120 130 140 150  
TCTGTGCCTTCTCATCTGCCGGTCCGTGTGCACTTCGCTTCACCTCTGCA

160 170 180 190 200  
CGTTGCATGGAGACCACCGTGAACGCCCATCAGATCCTGCCCAAGGTCTT

210 220 230 240 250  
ACATAAGAGGACTCTTGGACTCCCAGCAATGTCAACGACCGACCTTGAGG

260 270 280 290 300  
CCTACTTCAAAGACTGTGTGTTTAAGGACTGGGAGGAGCTGGGGGAGGAG

310 320 330 340 350  
ATTAGGTAAAGGTCTTTGTATTAGGAGGCTGTAGGCATAAATTGGTCTG

360 370 380 390 400  
CGCACCAGCACCATGCAACTTTTTACCTCTGCCTAATCATCTCTTGTA

410 420 430 440 450  
ATGTCCCCTGTTCAAGCCTCCAAGCTGTGCCTTGGGTGGCTTTGGGGCA

460 470 480 490 500  
TGGACATTGACCCTTATAAAGAATTTGGAGCTACTGTGGAGTTACTCTCG

510 520 530 540 550  
TTTTTGCCTTCTGACTTCTTTCCTTCCGTCAGAGATCTCCTAGACACCGC

560 570 580 590 600  
CTCAGCTCTGTATCGAGAAGCCTTAGAGTCTCCTGAGCATTGCTCACCTC

610 620 630 640 650  
ACCATACTGCACTCAGGCAAGCCATTCTCTGCTGGGGGGAATTGATGACT

660 670 680 690 700  
CTAGCTACCTGGGTGGGTAATAATTTGGAAGATCCAGCATCCAGGGATCT

Figure 5A

710 720 730 740 750  
AGTAGTCAATTATGTTAATACTAACATGGGTTTAAAGATCAGGCAACTAT

760 770 780 790 800  
TGTGGTTTCATATATCTTGCCTTACTTTTGAAGAGAGACTGTACTTGAA

810 820 830 840 850  
TATTTGGTCTCTTTCGGAGTGTGGATTGCACTCCTCCAGCCTATAGACC

860 870 880 890 900  
ACCAAATGCCCCCTATCTTATCAACACTTCCGGAACTACTGTTGTTAGAC

910 920 930 940 950  
GACGGGACCGAGGCAGGTCCCCTAGAAGAAGAACTCCCTCGCCTCGCAGA

960 970 980 990 1000  
CGCAGATCTCAATCGCCGCGTCGCAGAAGATCTCAATCTCGGGAATCTCA

1010 1020 1030 1040 1050  
ATGTTAGTATTCTTGGACTCATAAGGTGGGAACTTTACGGGGCTTTAT

1060 1070 1080 1090 1100  
TCCTCTACAGTACCTATCTTTAATCCTGAATGGCAAACCTCCTTCCTTTCC

1110 1120 1130 1140 1150  
TAAGATTCAATTTACAAGAGGACATTATTAATAGGTGTCAACAATTTGTGG

1160 1170 1180 1190 1200  
GCCCTCTCACTGTAAATGAAAAGAGAAGATTGAAATTAATTATGCCTGCT

1210 1220 1230 1240 1250  
AGATTCTATCCTACCCACACTAAATATTTGCCCTTAGACAAAGGAATTAA

1260 1270 1280 1290 1300  
ACCTTATTATCCAGATCAGGTAGTTAATCATTACTTCAAACCAGACATT

1310 1320 1330 1340 1350  
ATTTACATACTCTTTGGAAGGCTGGTATTCTATATAAGAGGGAAACCACA

1360 1370 1380 1390 1400  
CGTAGCGCATCATTTTGCGGGTCACCATATTCTTGGGAACAAGAGCTACA

1410 1420 1430 1440 1450  
GCATGGGAGGTTGGTCATCAAAACCTCGCAAAGGCATGGGGACGAATCTT

Figure 5A continued

1460 1470 1480 1490 1500  
 TCTGTTCCCAACCCTCTGGGATTCTTTCCCGATCATCAGTTGGACCCTGC  
 1510 1520 1530 1540 1550  
 ATTCGGAGCCAACTCAAACAATCCAGATTGGGACTTCAACCCCATCAAGG  
 1560 1570 1580 1590 1600  
 ACCACTGGCCAGCAGCCAACCAGGTAGGAGTGGGAGCATTCTGGGCCAGGG  
 1610 1620 1630 1640 1650  
 CTCACCCCTCCACACGGCGGTATTTTGGGGTGGAGCCCTCAGGCTCAGGG  
 1660 1670 1680 1690 1700  
 CATATTGACCACAGTGTCAACAATTCTCCTCCTGCCTCCACCAATCGGC  
 1710 1720 1730 1740 1750  
 AGTCAGGAAGGCAGCCTACTCCCATCTCTCCACCTCTAAGAGACAGTCAT  
 1760 1770 1780 1790 1800  
 CCTCAGGCCATGCAGTGAATTCCACTGCCTTCCACCAAGCTCTGCAGGA  
 1810 1820 1830 1840 1850  
 TCCCAGAGTCAGGGGTCTGTATCTTCTGCTGGTGGCTCCAGTTCAGGAA  
 1860 1870 1880 1890 1900  
 CAGTAAACCCTGCTCCGAATATTGCCTCTCACATCTCGTCAATCTCCGCG  
 1910 1920 1930 1940 1950  
 AGGACTGGGGACCCTGTGACGAACATGGAGAACATCACATCAGGATTCTCT  
 1960 1970 1980 1990 2000  
 AGGACCCCTGCTCGTGTTACAGGCGGGGTTTTTCTTGTTGACAAGAATCC  
 2010 2020 2030 2040 2050  
 TCACAATACCGCAGAGTCTAGACTCGTGGTGGACTTCTCTCAATTTTCTA  
 2060 2070 2080 2090 2100  
 GGGGGATCTCCCGTGTGTCTTGGCCAAAATTTCGAGTCCCCAACCTCCAA  
 2110 2120 2130 2140 2150  
 TCACTCACCAACCTCCTGTCCTCCAATTTGTCCTGGTTATCGCTGGATGT  
 2160 2170 2180 2190 2200  
 GTCTGCGGCGTTTTATCATATTCTCTTCATCCTGCTGCTATGCCTCATC

Figure 5A continued

2210 2220 2230 2240 2250  
TTCTTATTGGTTCTTCTGGATTATCAAGGTATGTTGCCCGTTTGTCTCT

2260 2270 2280 2290 2300  
AATTCCAGGATCAACAACAACCAGTACGGGACCATGCAAAACCTGCACGA

2310 2320 2330 2340 2350  
CTCCTGCTCAAGGCAACTCTATGTTTCCCTCATGTTGCTGTACAAAACCT

2360 2370 2380 2390 2400  
ACGGATGGAAATTGCACCTGTATTCCCATCCCATCGTCTGGGCTTTTCGC

2410 2420 2430 2440 2450  
AAAATACCTATGGGAGTGGGCCTCAGTCCGTTTCTCTTGCTCAGTTTAC

2460 2470 2480 2490 2500  
TAGTGCCATTTGTTTCAGTGGTTCGTAGGGCTTTCCCCCACTGTTGGCTT

2510 2520 2530 2540 2550  
TCAGCTATATGGATGATGTGGTATTGGGGGCCAAGTCTGTACAGCATCGT

2560 2570 2580 2590 2600  
GAGTCCCTTTATACCGCTGTTACCAATTTTCTTTTGTCTCTGGGTATACA

2610 2620 2630 2640 2650  
TTTAAACCCTAACAAAACAAAAAGATGGGGTTATTCCCTAAACTTCATGG

2660 2670 2680 2690 2700  
GCTACATAATTGGAAGTTGGGGAACTTTGCCACAGGATCATATTGTACAA

2710 2720 2730 2740 2750  
AAGATCAAACACTGTTTTAGAAAACCTCCTGTTAACAGGCCTATTGATTG

2760 2770 2780 2790 2800  
GAAAGTATGTCAAAGAATTGTGGGTCTTTTGGGCTTTGCTGCTCCATTTA

2810 2820 2830 2840 2850  
CACAAATGTGGATATCCTGCCTTAATGCCTTTGTATGCATGTATACAAGCT

2860 2870 2880 2890 2900  
AAACAGGCTTTCACTTTCTCGCCAACTTACAAGGCCTTTCTAAGTAAACA

2910 2920 2930 2940 2950  
GTACATGAACCTTTACCCCGTTGCTCGGCAACGGCCTGGTCTGTGCCAAG

Figure 5A continued

2960 2970 2980 2990 3000  
TGTTTGCTGACGCAACCCCCACTGGCTGGGGCTTGGCCATAGGCCATCAG

3010 3020 3030 3040 3050  
CGCATGCGTGGAACCTTTGTGGCTCCTCTGCCGATCCATACTGCGGAACT

3060 3070 3080 3090 3100  
CCTAGCCGCTTGTTTTGCTCGCAGCCGGTCTGGAGCAAAGCTCATCGGAA

3110 3120 3130 3140 3150  
CTGACAATTCTGTCGTCTCTCGCGGAAATATACATCGTTTCCATGGCTG

3160 3170 3180 3190 3200  
CTAGGGCTGTACTGCCAACTGGATCCTTCGCGGGACGTCCTTTGTTTACGT

3210 3220 3230 3240 3250  
CCCGTCGGCGCTGAATCCCGCGGACGACCCCTCGCGGGGCGCTTGGGAC

3260 3270 3280 3290 3300  
TCTCTCGTCCCCTTCTCCGTCTGCCGTTCCAGCCGACCACGGGGCGCACC

3310 3320 3330 3340 3350  
TCTCTTTACGCGGTCTCCCCGTCTGTGCCTTCTCATCTGCCGGTCCGTGT

3360 3370 3380 3390 3400  
GCACTTCGCTTCACCTCTGCACGTTGCATGGAGACCACCGTGAACGCCCA

3410 3420 3430 3440 3450  
TCAGATCCTGCCCAAGGTCTTACATAAGAGGACTCTTGGACTCCCAGCAA

3460 3470 3480 3490 3500  
TGTCAACGACCGACCTTGAGGCCTACTTCAAAGACTGTGTGTTTAAGGAC

3510 3520 3530 3540 3550  
TGGGAGGAGCTGGGGGAGGAGATTAGGTAAAGGTCTTTGTATTAGGAGG

3560 3570 3580 3590 3600  
CTGTAGGCATAAATTGGTCTGCGCACCAGCACCATGCAACTTTTTACCT

3610 3620 3630 3640 3650  
CTGCCTAATCATCTCTTGACATGTCCCACTGTTCAAGCCTCCAAGCTGT

3660 3670 3680 3690 3700  
GCCTTGGGTGGCTTTGGGGCATGGACATTGACCCTTATAAAGAATTTGGA

Figure 5A continued



3710 3720 3730 3740 3750  
GCTACTGTGGAGTTACTCTCGTTTTTGCCTTCTGACTTCTTTCCTTCCGT

3760 3770 3780 3790 3800  
CAGAGATCTCCTAGACACCGCCTCAGCTCTGTATCGAGAAGCCTTAGAGT

3810 3820 3830 3840 3850  
CTCCTGAGCATTGCTCACCTCACCATACTGCACTCAGGCAAGCCATTCTC

3860 3870 3880 3890 3900  
TGCTGGGGGGAATTGATGACTCTAGCTACCTGGGTGGGTAATAATTTGGA

3910 3920 3930 3940 3950  
AGATCCAGCATCCAGGGATCTAGTAGTCAATTATGTTAATACTAACATGG

3960 3970 3980 3990 4000  
GTTTAAAGATCAGGCAACTATTGTGGTTTCATATATCTTGCCTTACTTTT

4010 4020 4030 4040 4050  
GGAAGAGAGACTGTACTTGAATATTTGGTCTCTTTCGGAGTGTGGATTTCG

4060 4070 4080  
CACTCCTCCAGCCTATAGACCACCAAATGCCCT

Figure 5A continued

Sequence Range: 1 to 4496

10 20 30 40 50  
GATATCCTGCCTTAATGCCTTTGTATGCATGTATACAAGCTAAACAGGCT

60 70 80 90 100  
TTCACCTTTCTCGCCAACTTACAAGGCCTTTCTAAGTAAACAGTACATGAA

110 120 130 140 150  
CCTTTACCCCGTTGCTCGGCAACGGCCTGGTCTGTGCCAAGTGTGCTG

160 170 180 190 200  
ACGCAACCCCACTGGCTGGGGCTTGGCCATAGGCCATCAGCGCATGCGT

210 220 230 240 250  
GGAACCTTTGTGGCTCCTCTGCCGATCCATACTGCGGAACCTCTAGCCGC

260 270 280 290 300  
TTGTTTTGCTCGCAGCCGGTCTGGAGCAAAGCTCATCGGAACGACAATT

310 320 330 340 350  
CTGTCGTCTCTCGCGGAAATATACATCGTTTCCATGGCTGCTAGGCTGT

360 370 380 390 400  
ACTGCCAACTGGATCCTTCGCGGGACGTCTTTGTTTACGTCCCGTCGGC

410 420 430 440 450  
GCTGAATCCCGCGGACGACCCCTCGCGGGGCCGCTTGGGACTCTCTCGTC

460 470 480 490 500  
CCCTTCTCCGTCTGCCGTTCCAGCCGACCACGGGGCGCACCTCTCTTTAC

510 520 530 540 550  
GCGGTCTCCCGTCTGTGCCTTCTCATCTGCCGGTCCGTGTGCACTTCGC

560 570 580 590 600  
TTCACCTCTGCACGTTGCATGGAGACCACCGTGAACGCCCATCAGATCCT

610 620 630 640 650  
GCCCAAGGTCTTACATAAGAGGACTCTTGGACTCCCAGCAATGTCAACGA

660 670 680 690 700  
CCGACCTTGAGGCCTACTTCAAAGACTGTGTGTTTAAGGACTGGGAGGAG

Figure 5B

710 720 730 740 750  
CTGGGGGAGGAGATTAGGTTAAAGGTCTTTGTATTAGGAGGCTGTAGGCA

760 770 780 790 800  
TAAATTGGTCTGCGCACCAGCAGCATGCAACTTTTTACCTCTGCCTAAT

810 820 830 840 850  
CATCTCTTGTACATGTCCCACTGTTCAAGCCTCCAAGCTGTGCCTTGGGT

860 870 880 890 900  
GGCTTTGGGGCATGGACATTGACCCTTATAAAGAATTTGGAGCTACTGTG

910 920 930 940 950  
GAGTTACTCTCGTTTTTGCCTTCTGACTTCTTTCCTTCCGTGAGAGATCT

960 970 980 990 1000  
CCTAGACACCGCCTCAGCTCTGTATCGAGAAGCCTTAGAGTCTCCTGAGC

1010 1020 1030 1040 1050  
ATTGCTCACCTCACCATACTGCACTCAGGCAAGCCATTCTCTGCTGGGGG

1060 1070 1080 1090 1100  
GAATTGATGACTCTAGCTACCTGGGTGGGTAATAATTTGGAAGATCCAGC

1110 1120 1130 1140 1150  
ATCCAGGGATCTAGTAGTCAATTATGTTAATACTAACATGGGTTTAAAGA

1160 1170 1180 1190 1200  
TCAGGCAACTATTGTGGTTTCATATATCTTGCCTTACTTTTGAAGAGAG

1210 1220 1230 1240 1250  
ACTGTACTTGAATATTTGGTCTCTTTCGGAGTGTGGATTGCACTCCTCC

1260 1270 1280 1290 1300  
AGCCTATAGACCACCAAATGCCCCTATCTTATCAACACTTCCGGAAACTA

1310 1320 1330 1340 1350  
CTGTTGTTAGACGACGGGACCGAGGCAGGTCCCCTAGAAGAAGAACTCCC

1360 1370 1380 1390 1400  
TCGCCTCGCAGACGCAGATCTCAATCGCCGCGTCGCAGAAGATCTCAATC

1410 1420 1430 1440 1450  
TCGGGAATCTCAATGTTAGTATTCCTTGGAATCATAAGGTGGGAACTTT

Figure 5B continued

1460 1470 1480 1490 1500  
ACGGGGCTTTATTCTCTACAGTACCTATCTTTAATCCTGAATGGCAAAC

1510 1520 1530 1540 1550  
TCCTTCCTTTCCTAAGATTCATTTACAAGAGGACATTATTAATAGGTGTC

1560 1570 1580 1590 1600  
AACAAATTTGTGGGCCCTCTCACTGTAAATCAAAAGAGAAGATTGAAATTA

1610 1620 1630 1640 1650  
ATTATGCCTGCTAGATTCTATCCTACCCACACTAAATATTTGCCCTTAGA

1660 1670 1680 1690 1700  
CAAAGGAATTAAACCTTATTATCCAGATCAGGTAGTTAATCATTACTTCC

1710 1720 1730 1740 1750  
AAACCAGACATTATTTACATACTCTTTGGAAGGCTGGTATTCTATATAAG

1760 1770 1780 1790 1800  
AGGGAAACCACACGTAGCGCATCATTTTGC GGTCACCATATTCTTGGGA

1810 1820 1830 1840 1850  
ACAAGAGCTACAGCATGGGAGGTTGGTCATCAAAACCTCGCAAAGGCATG

1860 1870 1880 1890 1900  
GGGACGAATCTTTCTGTTCCCAACCCTCTGGGATTCTTTCCCGATCATCA

1910 1920 1930 1940 1950  
GTTGGACCCTGCATTCGGAGCCAACTCAAACAATCCAGATTGGGACTTCA

1960 1970 1980 1990 2000  
ACCCCATCAAGGACCACTGGCCAGCAGCCAACCAGGTAGGAGTGGGAGCA

2010 2020 2030 2040 2050  
TTCGGGCCAGGGCTCACCCCTCCACACGGCGGTATTTTGGGGTGGAGCCC

2060 2070 2080 2090 2100  
TCAGGCTCAGGGCATATTGACCACAGTGTCAACAATTCCTCCTCCTGCCT

2110 2120 2130 2140 2150  
CCACCAATCGGCAGTCAGGAAGGCAGCCTACTCCCATCTCTCCACCTCTA

2160 2170 2180 2190 2200  
AGAGACAGTCATCCTCAGGCCATGCAGTGGAATTCCACTGCCTTCCACCA

Figure 5B continued

2210 2220 2230 2240 2250  
AGCTCTGCAGGATCCCAGAGTCAGGGGTCTGTATCTTCCTGCTGGTGGCT

2260 2270 2280 2290 2300  
CCAGTTCAGGAACAGTAAACCCTGCTCCGAATATTGCCTCTCACATCTCG

2310 2320 2330 2340 2350  
TCAATCTCCGCGAGGACTGGGGACCCTGTGACGAACATGGAGAACATCAC

2360 2370 2380 2390 2400  
ATCAGGATTCTAGGACCCCTGCTCGTGTTACAGGCGGGGTTTTCTTGT

2410 2420 2430 2440 2450  
TGACAAGAATCCTCACAATACCGCAGAGTCTAGACTCGTGGTGGACTTCT

2460 2470 2480 2490 2500  
CTCAATTTTCTAGGGGGATCTCCCGTGTGTCTTGGCCAAAATTGCGAGTC

2510 2520 2530 2540 2550  
CCCAACCTCCAATCACTCACCAACCTCCTGTCCTCCAATTTGTCCTGGTT

2560 2570 2580 2590 2600  
ATCGCTGGATGTGTCTGCGGCGTTTTATCATATTCTTCTTCATCCTGCTG

2610 2620 2630 2640 2650  
CTATGCCTCATCTTCTTATTGGTTCTTCTGGATTATCAAGGTATGTTGCC

2660 2670 2680 2690 2700  
CGTTTGTCTCTAATTCCAGGATCAACAACAACCAGTACGGGACCATGCA

2710 2720 2730 2740 2750  
AAACCTGCACGACTCCTGCTCAAGGCAACTCTATGTTTCCCTCATGTTGC

2760 2770 2780 2790 2800  
TGTACAAAACCTACGGATGGAAATTGCACCTGTATCCCATCCCATCGTC

2810 2820 2830 2840 2850  
CTGGGCTTTTCGAAAATACCTATGGGAGTGGGCCTCAGTCCGTTTCTCTT

2860 2870 2880 2890 2900  
GGCTCAGTTTACTAGTGCCATTTGTTTCAAGTGGTTCGTAGGGCTTTCCCC

2910 2920 2930 2940 2950  
ACTGTTTGGCTTTCAGCTATATGGATGATGTGGTATTGGGGGCCAAGTCT

Figure 5B continued

2960 2970 2980 2990 3000  
GTACAGCATCGTGAGTCCCTTTATACCGCTGTTACCAATTTTCTTTTGTC

3010 3020 3030 3040 3050  
TCTGGGTATACATTTAAACCCTAACAAAACAAAAGATGGGGTTATTCCC

3060 3070 3080 3090 3100  
TAAACTTCATGGGCTACATAATTGGAAGTTGGGGAACCTTGCCACAGCAT

3110 3120 3130 3140 3150  
CAPATTGTACAAAAGATCAAACACTGTTTTAGAAAACCTTCTGTTAACAG

3160 3170 3180 3190 3200  
GCCTATTGATTGGAAAGTATGTCAAAGAATTGTGGGTCTTTTGGGCTTTG

3210 3220 3230 3240 3250  
CTGCTCCATTTACACAATGTGGATATCCTGCCTTAATGCCTTTGTATGCA

3260 3270 3280 3290 3300  
TGTATACAAGCTAAACAGGCTTTCACTTTCTGCCAACTTACAAGGCCTT

3310 3320 3330 3340 3350  
TCTAAGTAAACAGTACATGAACCTTTACCCCGTTGCTCGGCAACGGCCTG

3360 3370 3380 3390 3400  
GTCTGTGCCAAGTGTTTGCTGACGCAACCCCCACTGGCTGGGGCTTGCC

3410 3420 3430 3440 3450  
ATAGGCCATCAGCGCATGCGTGGAACCTTTGTGGCTCCTCTGCCGATCCA

3460 3470 3480 3490 3500  
TACTGCGGAACCTCCTAGCCGCTTGTTTTGCTCGCAGCCGGTCTGGAGCAA

3510 3520 3530 3540 3550  
AGCTCATCGGAACCTGACAATTCTGTGCTCCTCTCGCGGAAATATACATCG

3560 3570 3580 3590 3600  
TTTCCATGGCTGCTAGGCTGTACTGCCAACTGGATCCTTCGCGGGACGTC

3610 3620 3630 3640 3650  
CTTTGTTTACGTCCCGTCGGCGCTGAATCCCGCGGACGACCCCTCGCGGG

3660 3670 3680 3690 3700  
GCCGCTTGGGACTCTCTCGTCCCCTTCTCCGTCTGCCGTTCCAGCCGACC

Figure 5B continued

3710 3720 3730 3740 3750  
ACGGGGCGCACCTCTCTTTACGCGGTCTCCCCGTCTGTGCCTTCTCATCT

3760 3770 3780 3790 3800  
GCCGGTCCGTGTGCACTTCGCTTCACCTCTGCACGTTGCATGGAGACCAC

3810 3820 3830 3840 3850  
CGTGAACGCCCATCAGATCCTGCCCAAGGTCTTACATAAGAGGACTCTTG

3860 3870 3880 3890 3900  
GACTCCCAGCAATGTCAACGACCGACCTTGAGGCCTACTTCAAAGACTGT

3910 3920 3930 3940 3950  
GTGTTTAAAGGACTGGGAGGAGCTGGGGGAGGAGATTAGGTTAAAGGTCTT

3960 3970 3980 3990 4000  
TGTATTAGGAGGCTGTAGGCATAAATTGGTCTGCGCACCAGCACCATGCA

4010 4020 4030 4040 4050  
ACTTTTTCACCTCTGCCTAATCATCTCTTGTACATGTCCCACTGTTCAAG

4060 4070 4080 4090 4100  
CCTCCAAGCTGTGCCTTGCGGTGGCTTTGGGGCATGGACATTGACCCTTAT

4110 4120 4130 4140 4150  
AAAGAATTGGAGCTACTGTGGAGTTACTCTCGTTTTTGCCTTCTGACTT

4160 4170 4180 4190 4200  
CTTTCCTTCCGTCAGAGATCTCCTAGACACCGCCTCAGCTCTGTATCGAG

4210 4220 4230 4240 4250  
AAGCCTTAGAGTCTCCTGAGCATTGCTCACCTCACCATACTGCACTCAGG

4260 4270 4280 4290 4300  
CAAGCCATTCTCTGCTGGGGGGAATTGATGACTCTAGCTACCTGGGTGGG

4310 4320 4330 4340 4350  
TAATAATTTGGAAGATCCAGCATCCAGGGATCTAGTAGTCAATTATGTTA

4360 4370 4380 4390 4400  
ATACTAACATGGGTTTAAAGATCAGGCAACTATTGTGGTTTCATATATCT

4410 4420 4430 4440 4450  
TGCCTTACTTTTGAAGAGAGACTGTACTTGAATATTTGGTCTCTTTTCGG

4460 4470 4480 4490  
AGTGTGGATTTCGCACTCCTCCAGCCTATAGACCACCAAATGCCCT

Figure 5B continued

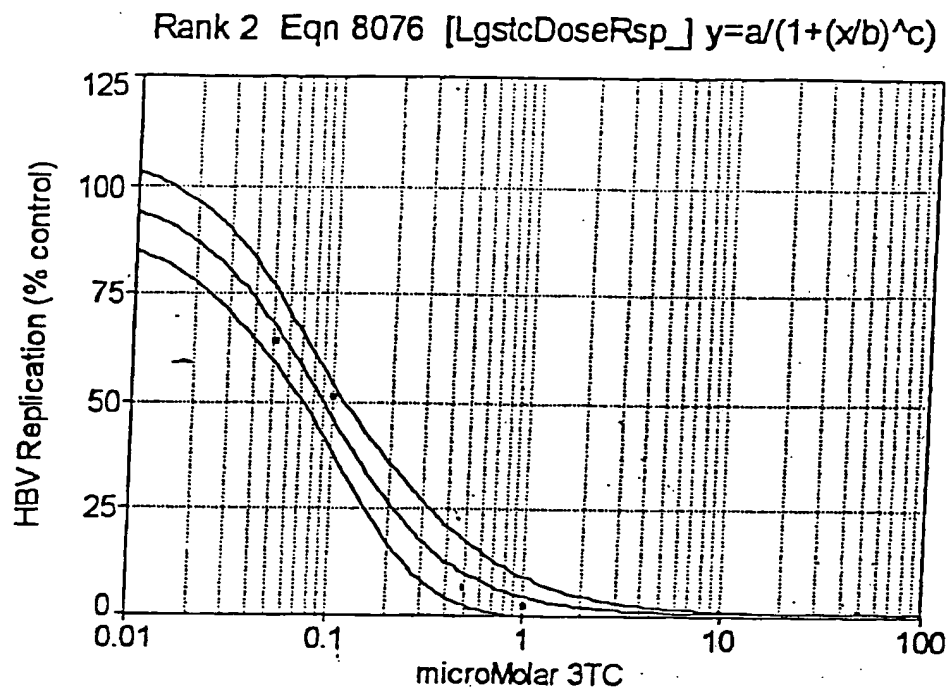


Figure 6A

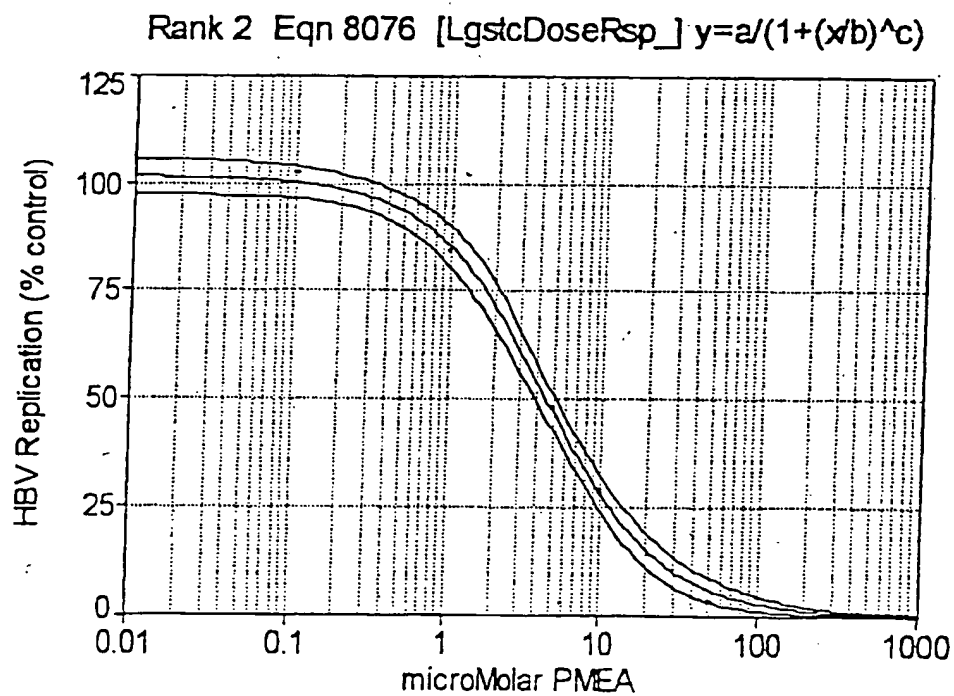


Figure 6B



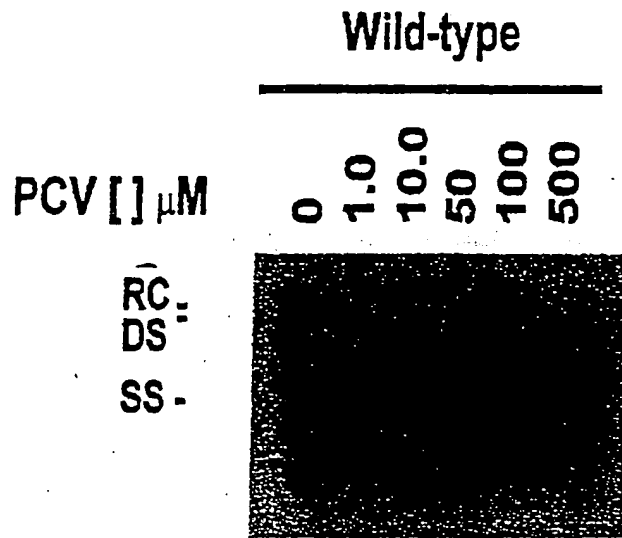


Figure 6C

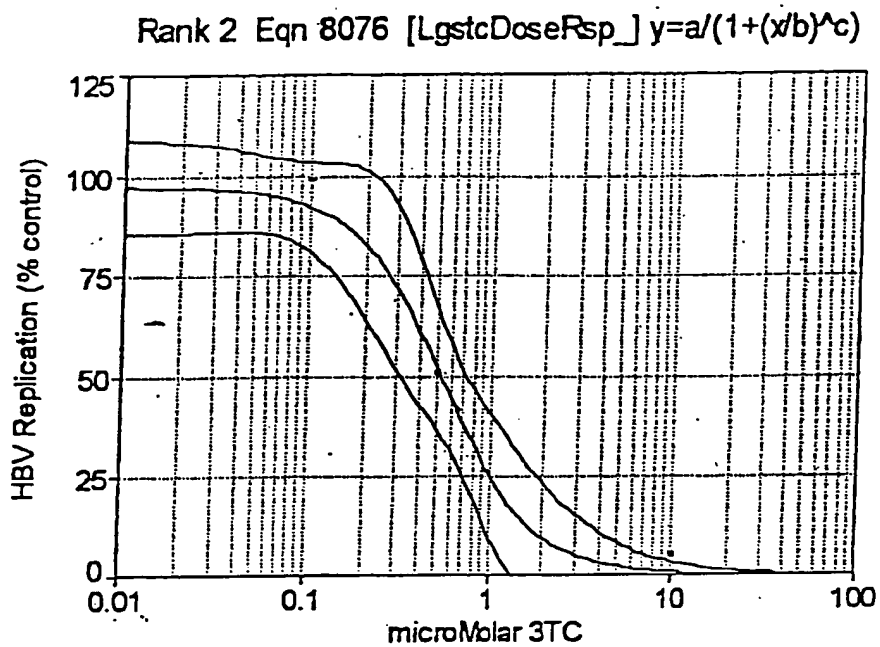


Figure 7A

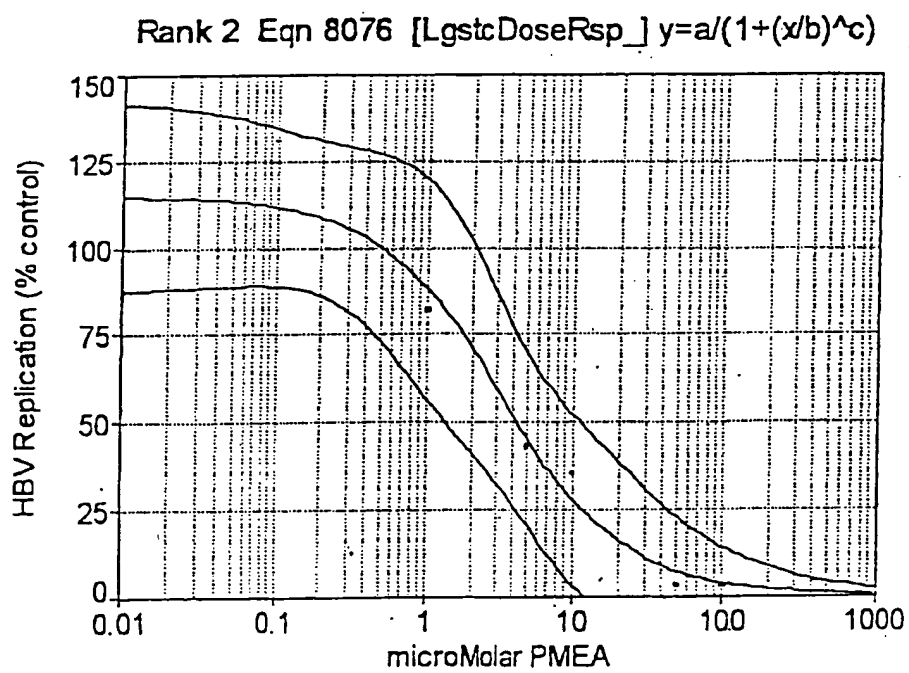


Figure 7B

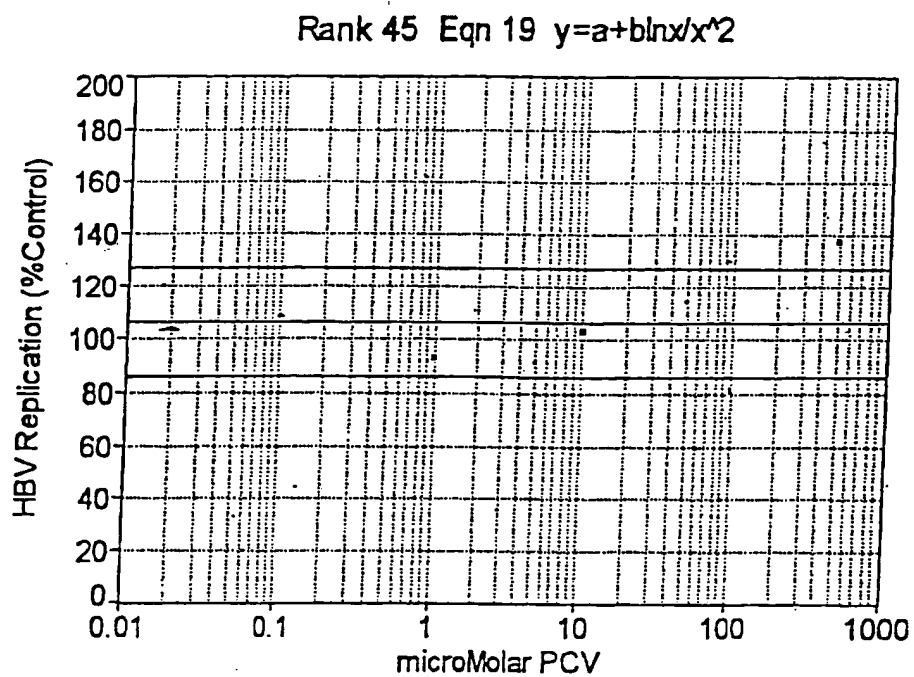


Figure 7C

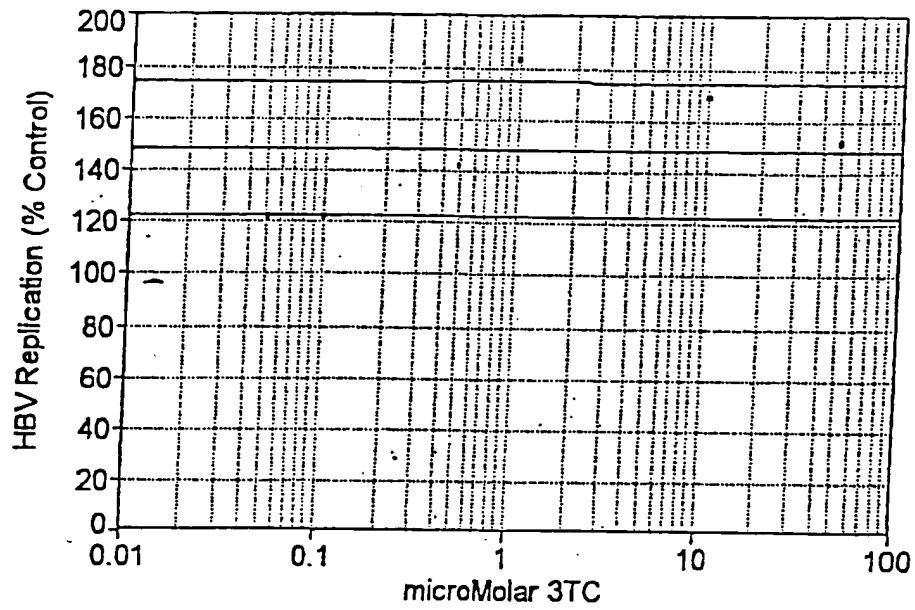
Rank 8 Eqn 10  $y=a+b(\ln x)^2$ 

Figure 8A

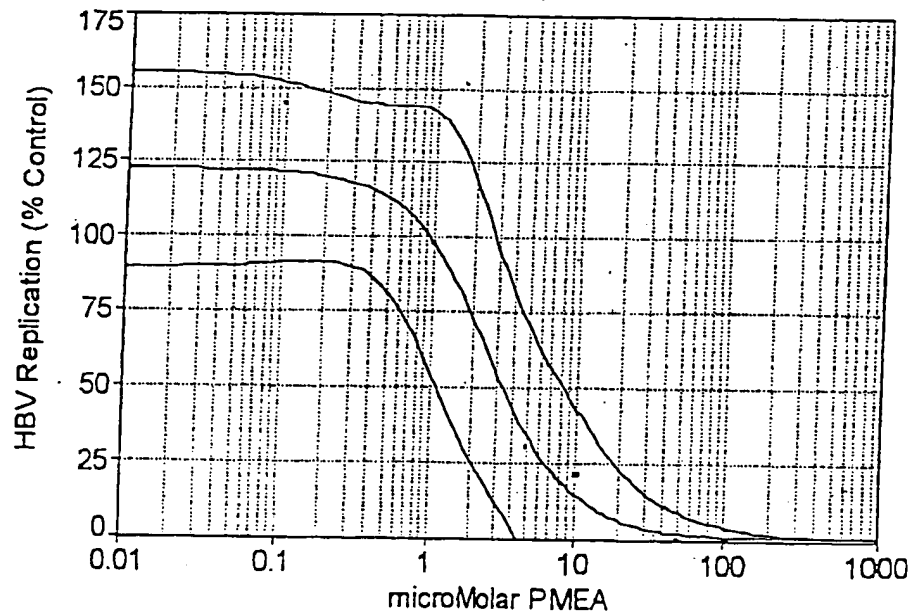
Rank 2 Eqn 8076 [LgstcDoseRsp]  $y=a/(1+(x/b)^c)$ 

Figure 8B

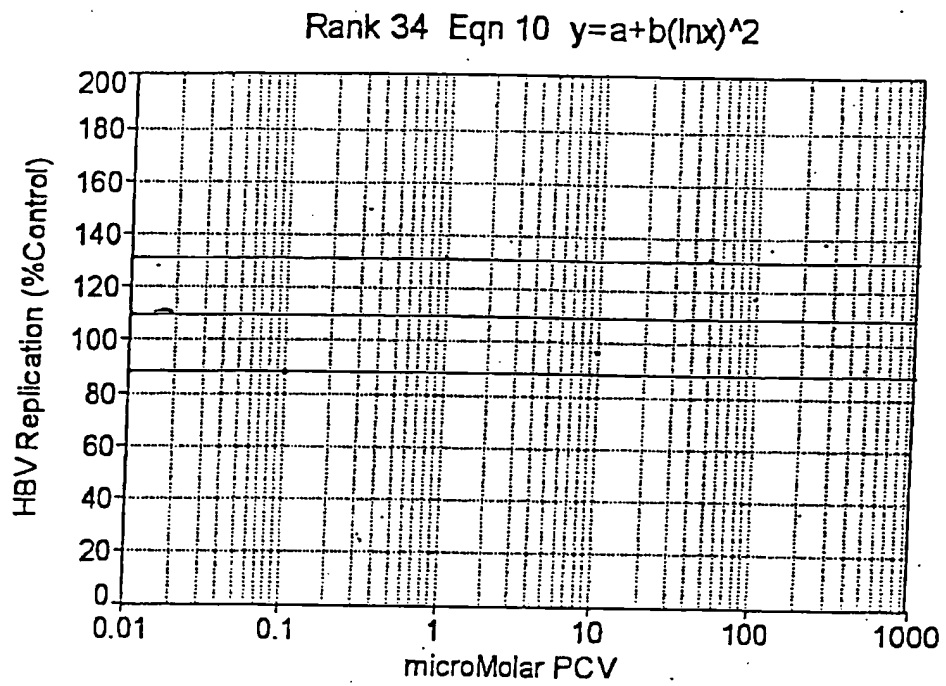


Figure 8C

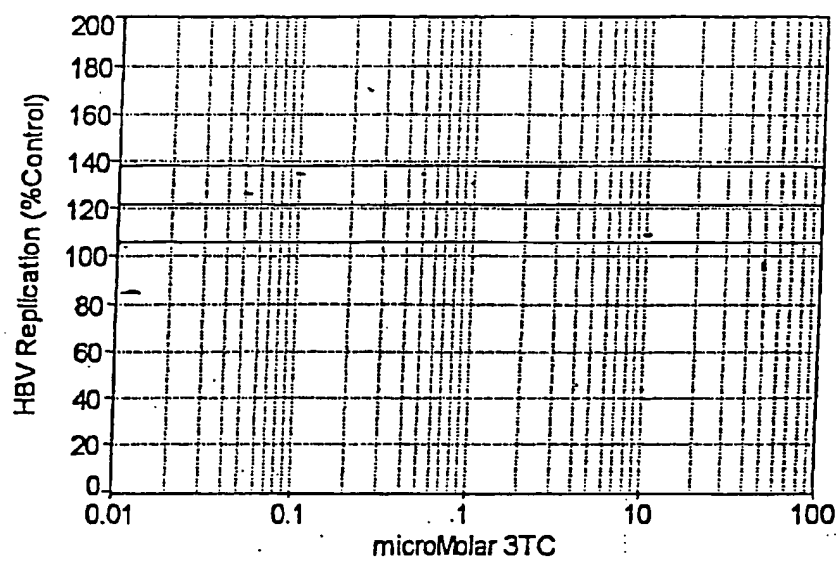
Rank 45 Eqn 10  $y=a+b(\ln x)^2$ 

Figure 9A

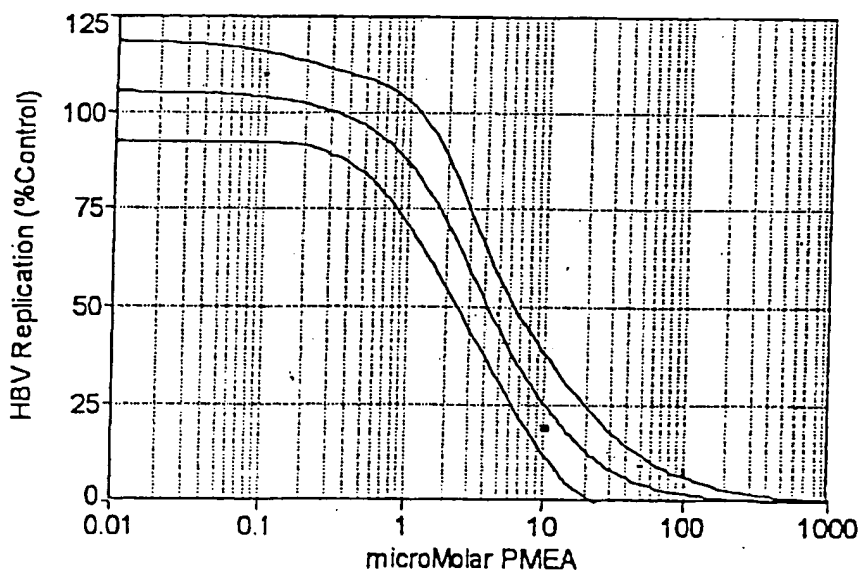
Rank 2 Eqn 8076  $[LgscDoseRsp] y=a/(1+(x/b)^c)$ 

Figure 9B

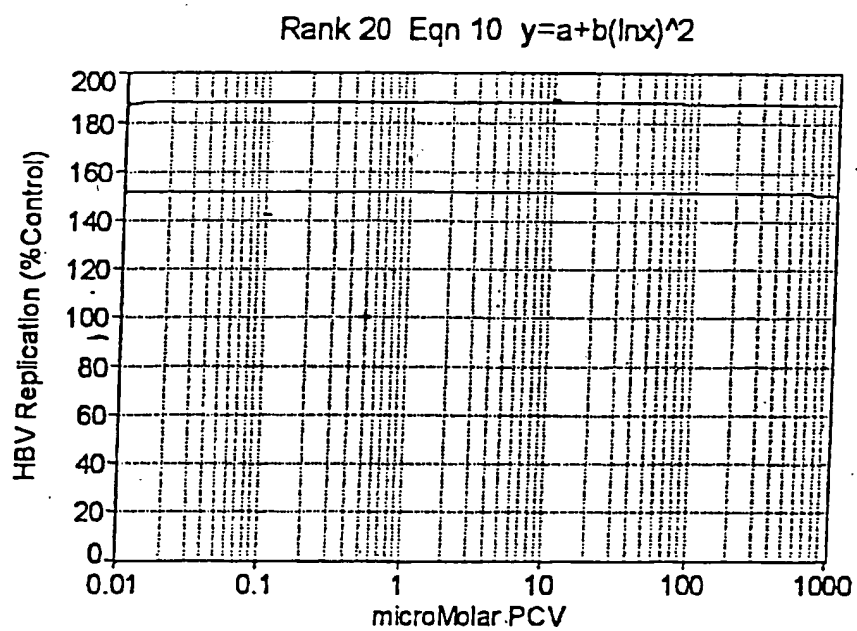


Figure 9C

## Cold dCTP Competition

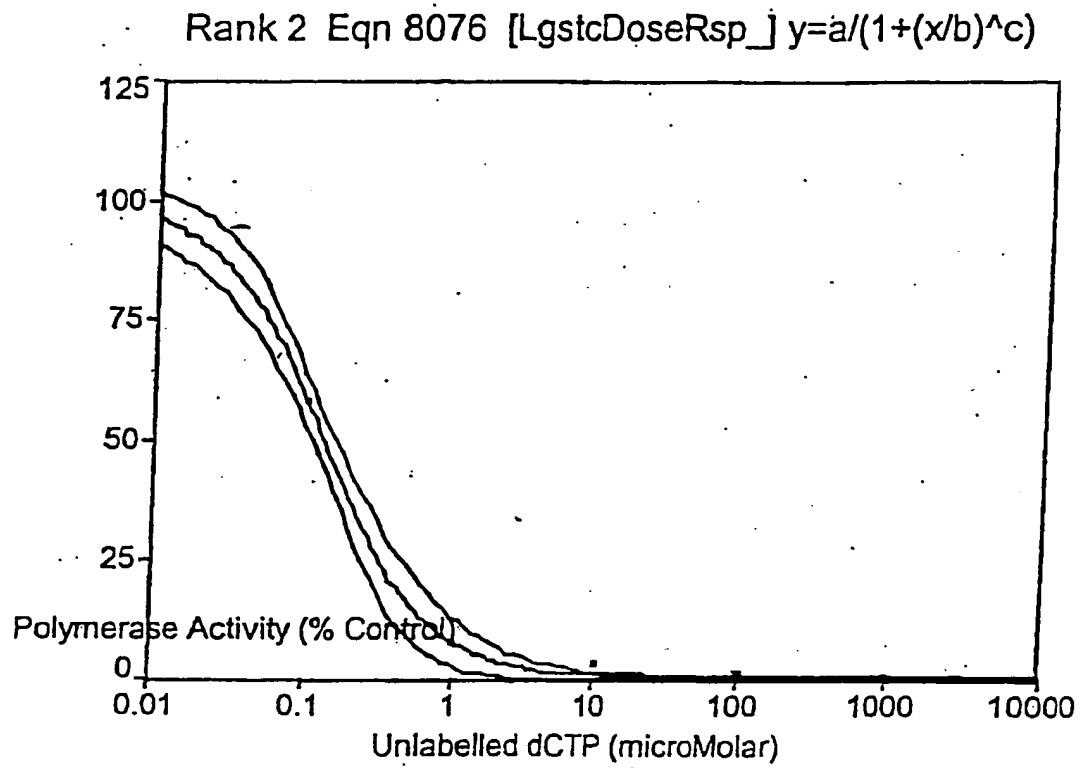
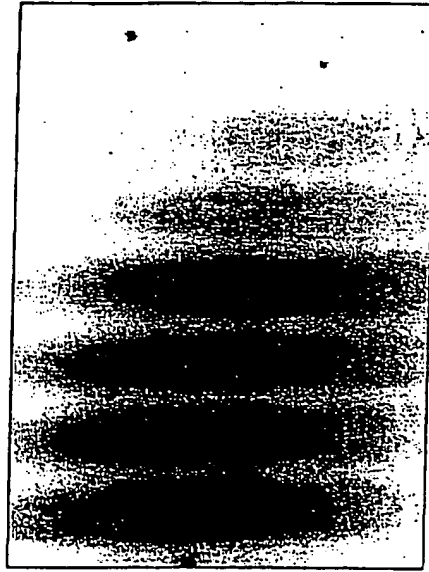


Figure 10

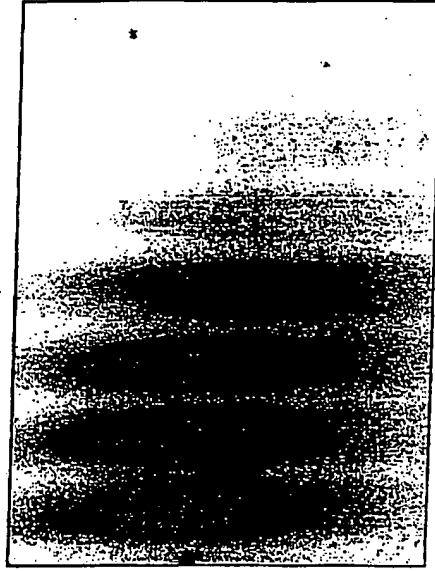


WT



Adefovir (μM) 0 0.01 0.05 0.1 1 10 100

RC  
DS  
SS



0 0.01 0.05 0.1 1 10 100

Figure 11A

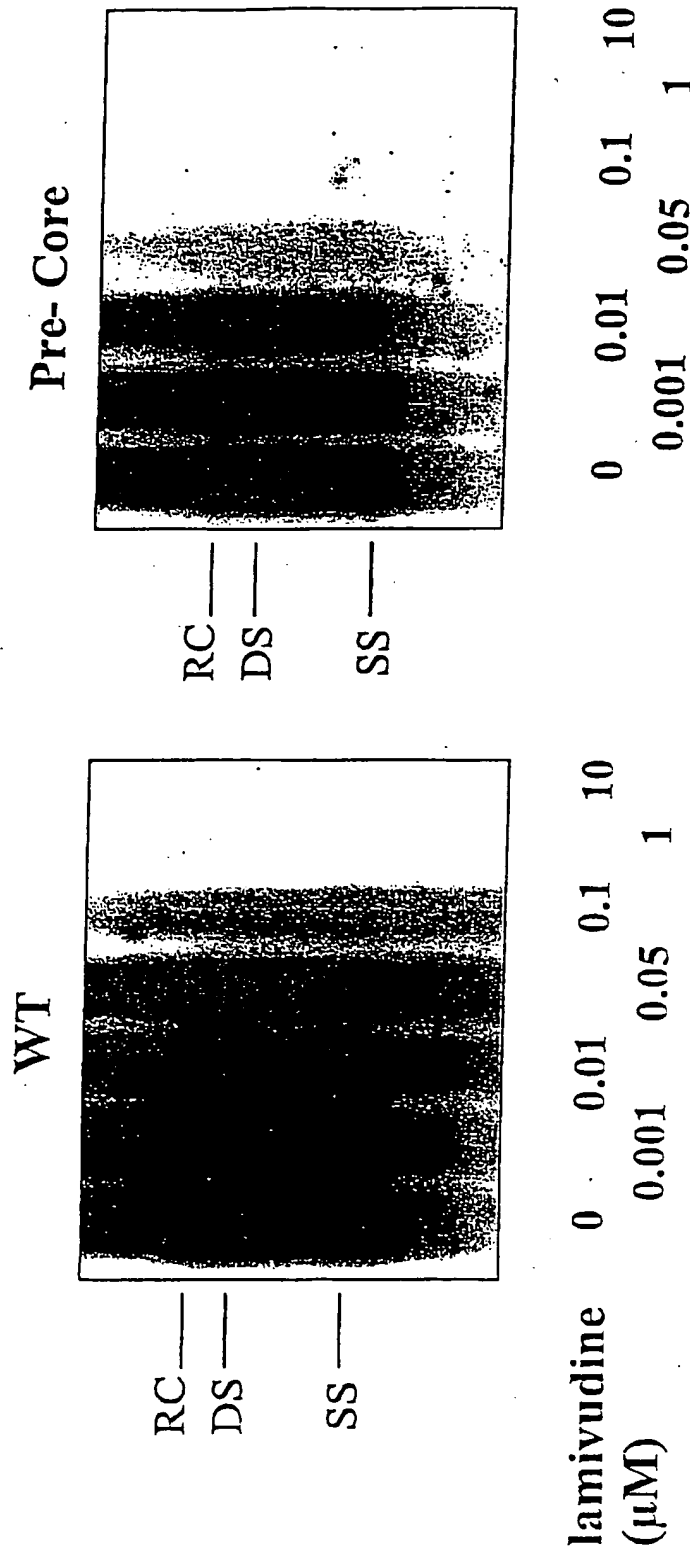


Figure 11B

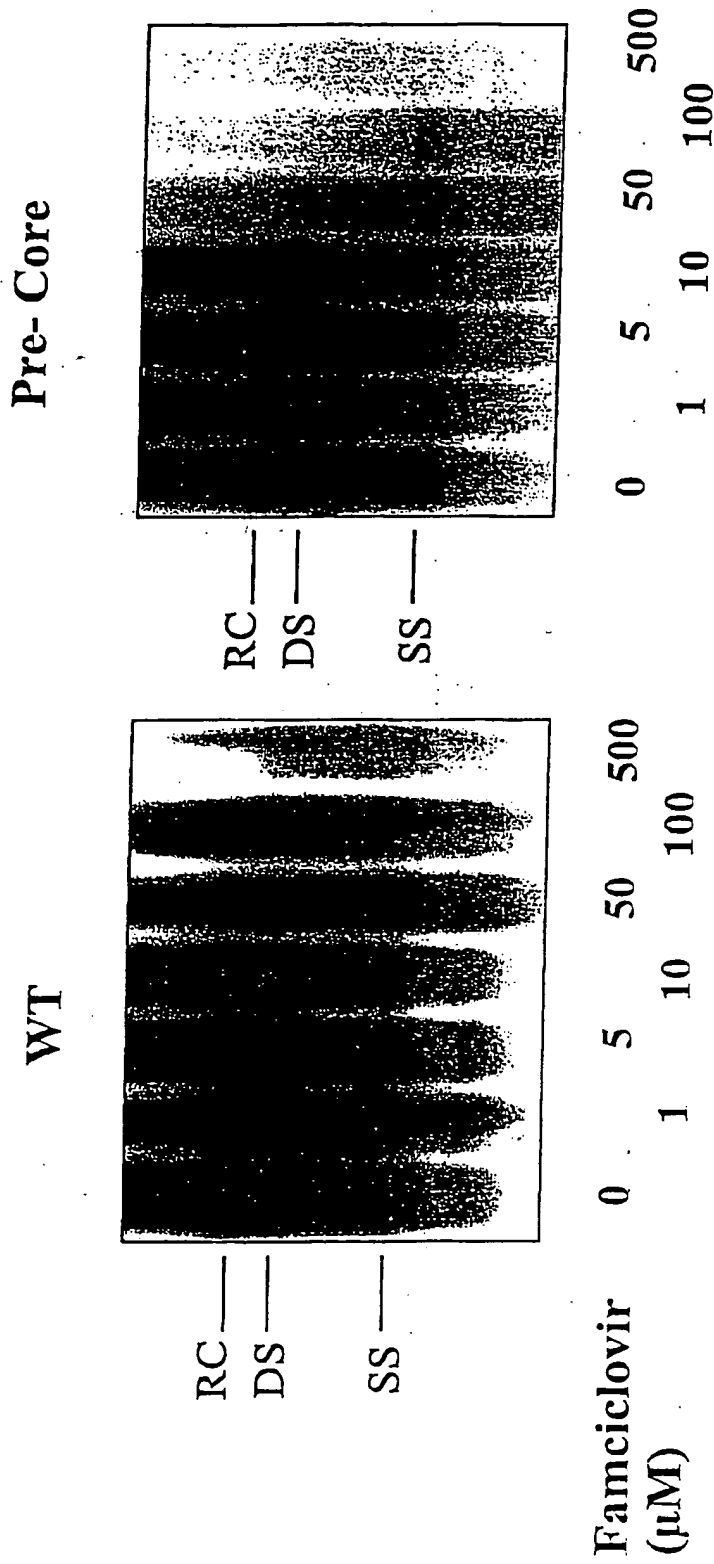


Figure 11C

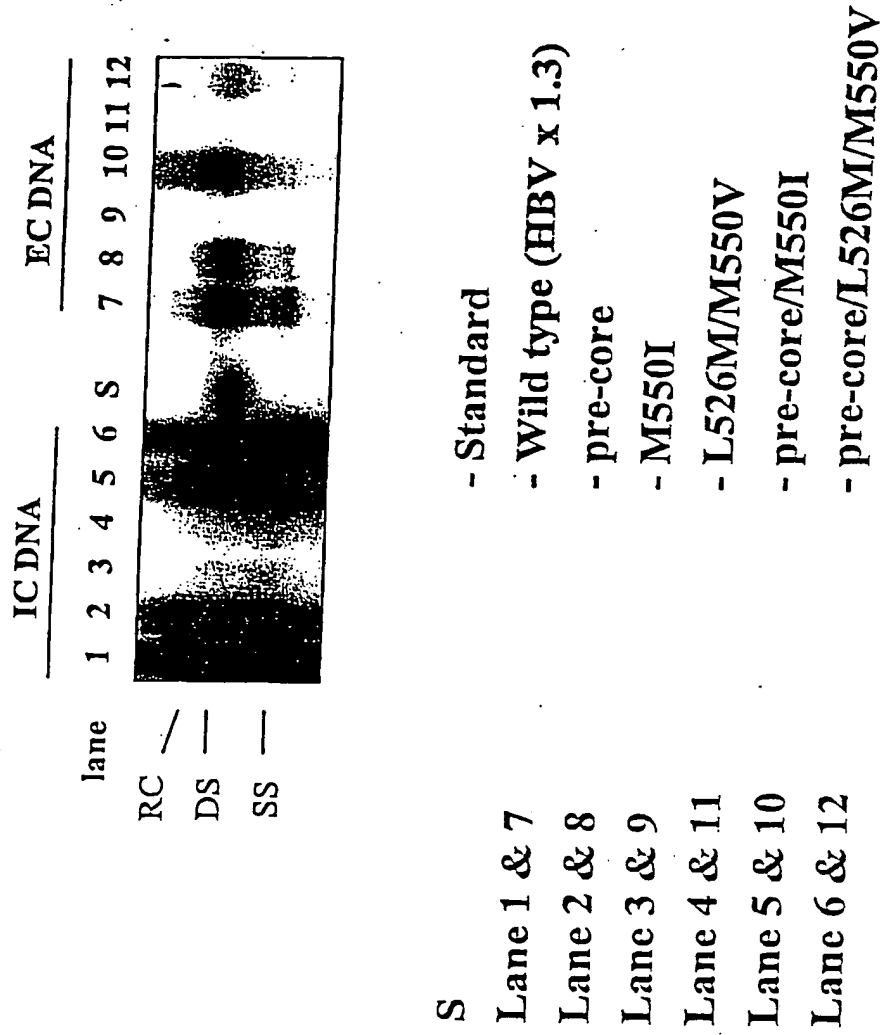


Figure 12

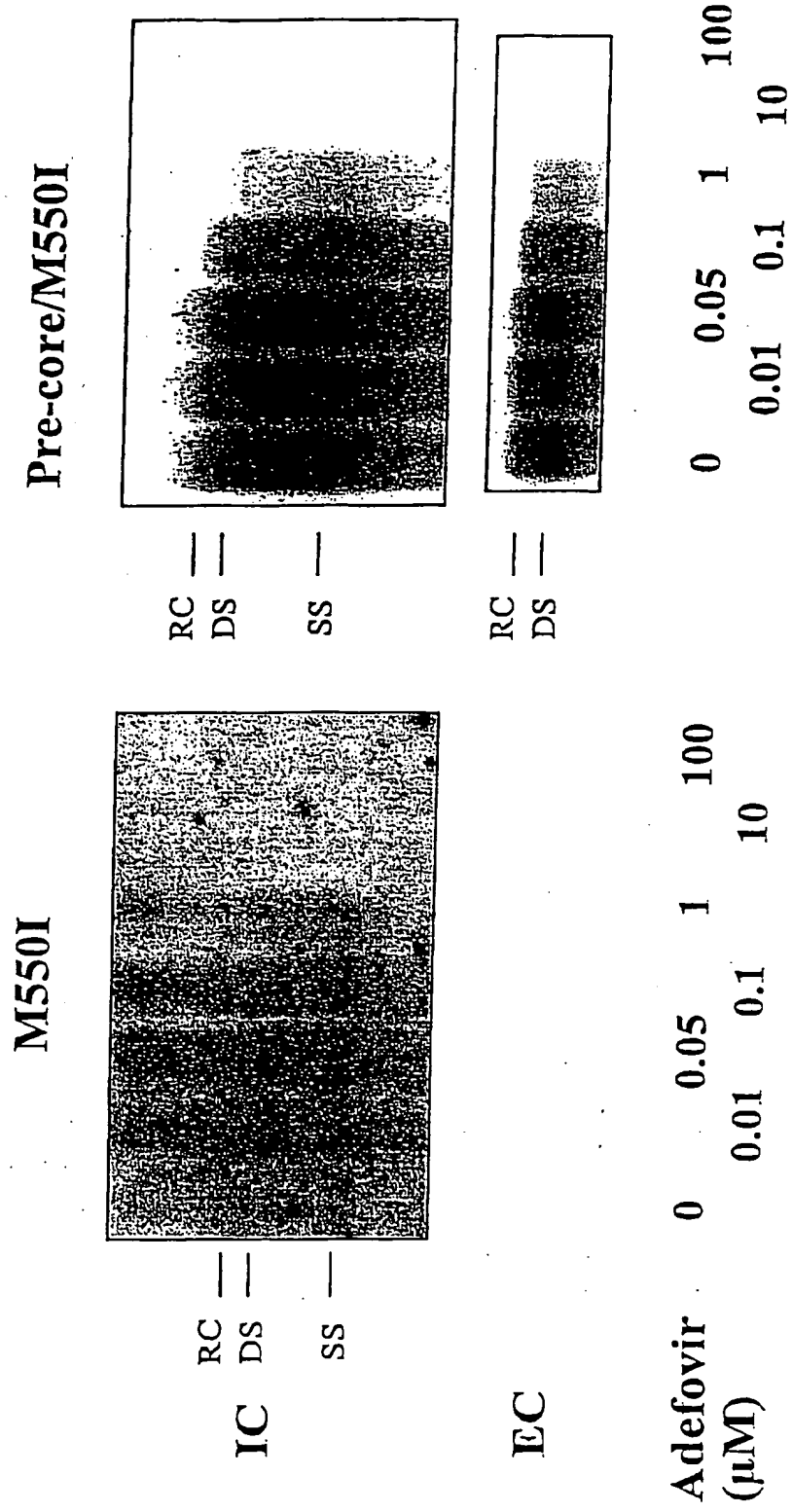


Figure 13A

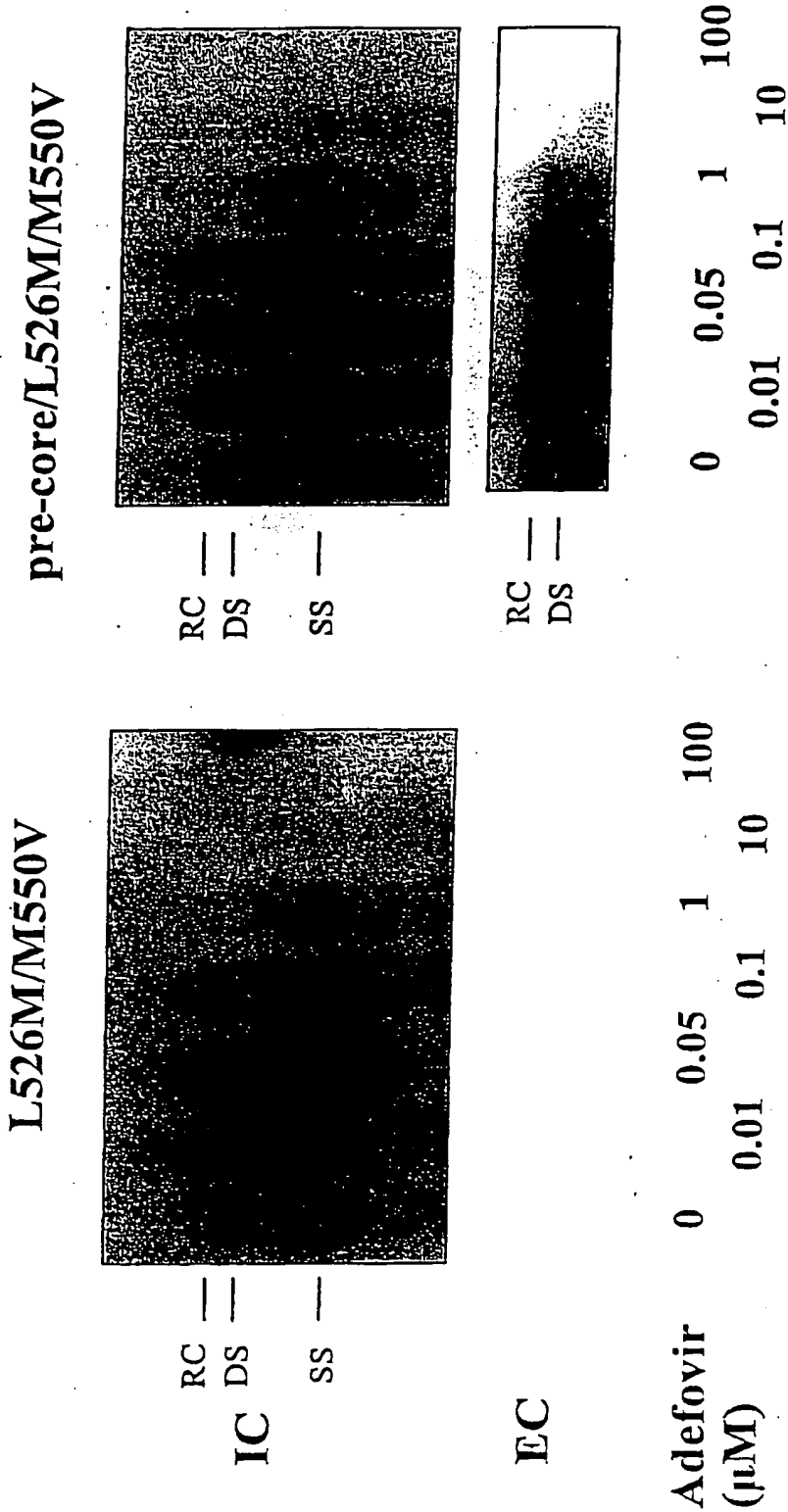


Figure 13B

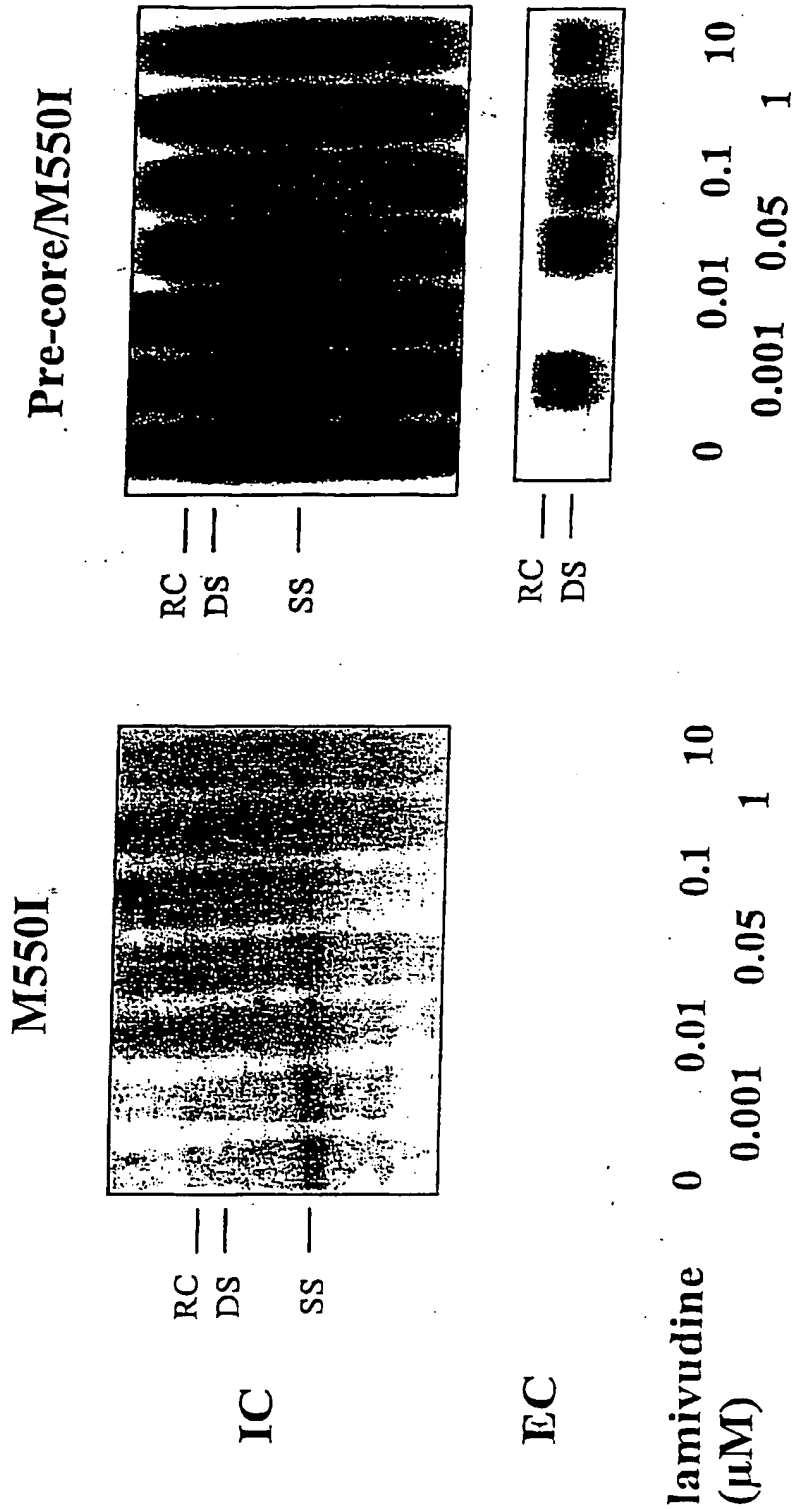


Figure 13C

L526M/M550V Pre-core/L526M/M550V

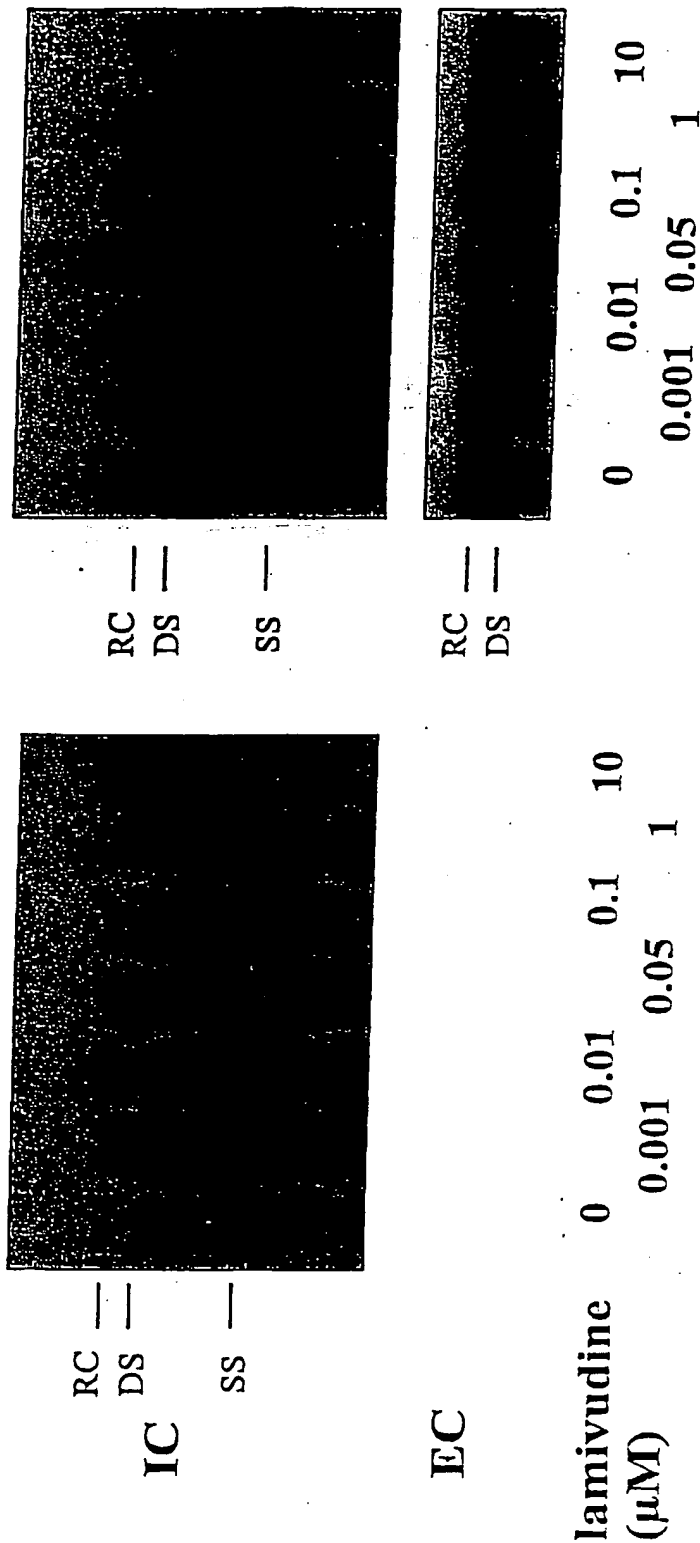
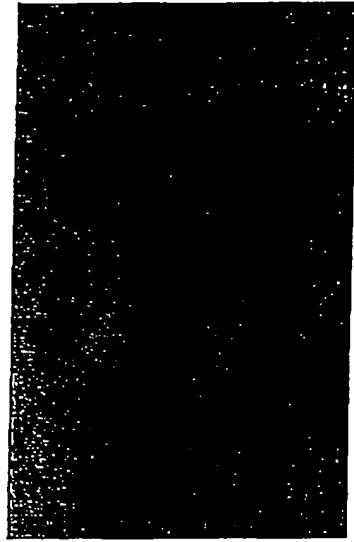


Figure 13D



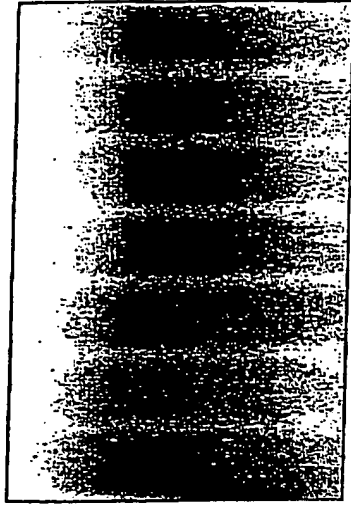
M550I



RC —  
DS —  
SS —

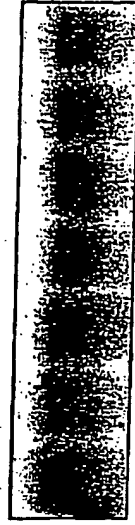
IC

Pre-core/M550I



RC —  
DS —

EC

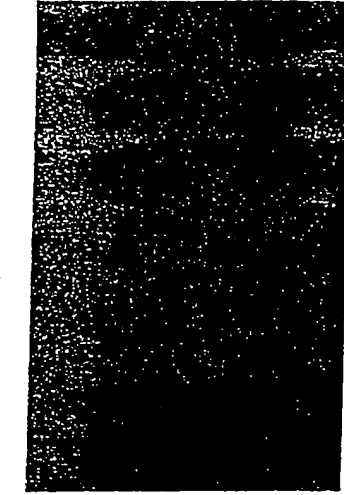


Famciclovir (μM)      0      1      5      10      50      100      500

Figure 13E

Pre-core/L526M/M550V

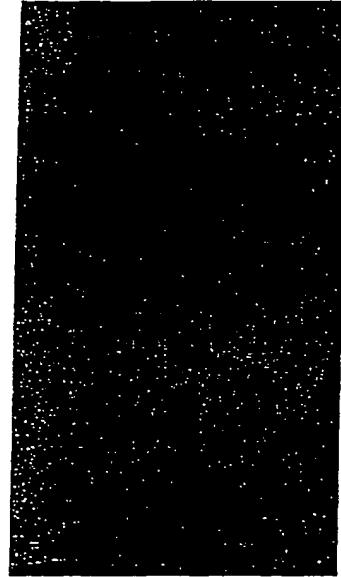
L526M/M550V



RC —  
DS —  
SS —



RC —  
DS —



RC —  
DS —  
SS —

IC

EC

Famciclovir  
( $\mu$ M)

0	5	50	500
1	10	100	
			0
			1
			5
			10
			50
			100
			500

Figure 13F